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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,890	11/20/2000	David N. S. Hon	460-001 Cont.IV	5003
22465	7590	07/13/2004	EXAMINER	
PITTS AND BRITTIAN P C			LEITH, PATRICIA A	
P O BOX 51295			ART UNIT	
KNOXVILLE, TN 37950-1295			PAPER NUMBER	
			1654	

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/716,890	HON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Patricia Leith	1654	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 28,30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28, 30 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

Claims 28 and 30-31 are pending in the application and were examined on the merits.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a previous Office Action.

#### ***Claim Rejections - 35 USC § 112***

Claims 28 and 30-31 remain rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for compositions as described in the Instant specification, i.e., Example 1, does not reasonably provide enablement for a composition comprising an active ingredient comprising the particular parts of ions as Instantly claimed. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims.

Applicant's arguments were fully considered, but not found persuasive.

Applicant argues that "the differences in the Examiner's characterization of the language of Claim 1 and the actual language of Claim 1 is of critical importance.

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Specifically, Claim 1 calls for .....”inorganic solids”. Note is to be taken of the plural word “solids” (p.4, Arguments). Applicant contends that “The claimed composition is made up of a plurality of inorganic solids, i.e., potassium ions, ....rubidium ions. Each of these ingredients is a cation and its contribution to the composition is determined on this basis not on the basis of the weight of any counterions which may be in the composition”.

However, the Examiner respectfully disagrees. A plurality of solids, say 100, would still require that the ions be present in a particular ratio simply due to the chemical nature of the ions listed in the claims. The contention that ‘Each of....is determined on this basis not on the basis of the weight...’ is inconclusive and not supported by the Instant specification or what is known in the art with regard to basic chemistry. There is nowhere in the Instant specification that teaches that the amounts of each constituent are based upon the cations. This is not understood because, as stated in the previous Office Action, a solid will contain the compounds formed of ionic material, but not the elements in their ionic form. The ionic form of the elements will only be found when the solids become ionized via crushing and adding to water or vaporization for examples.

Applicant further points out pages 3-4 of the Specification which reads “Thus, synthetic.....The solution may also contain OTHER INORGANIC CATIONS”. (pp. 4-5, Arguments) However, Applicant is referring to an embodiment in the specification which

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is directed toward a ***solution and not a solid*** and therefore this argument is without merit. Even if these ions were in solution, it has not been taught how one would add 80 parts of potassium by weight of the ions into a solution. The potassium will be added as potassium complexed by another ion; i.e., potassium carbonate is used in the Instant specification. Therefore, in order to achieve 80 parts of potassium by weight of *only the ions present in solution*, a considerable amount of carbonate ions would need to be removed from the solution to achieve this upper limit of potassium ions. Applicant has not demonstrated such a method in the Instant specification and therefore the skilled artisan ***would not be able to make the Instantly claimed compositions.***

No Claims are allowed.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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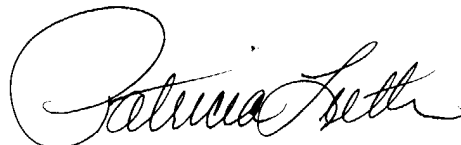
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia Leith whose telephone number is (571) 272-0968. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda Brumback can be reached on (571) 272-0961. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia Leith  
Primary Examiner  
Art Unit 1654

A handwritten signature in black ink, appearing to read 'Patricia Leith', is written over the printed name and title.

07/01/04